

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
14 December 2000 (14.12.2000)

PCT

(10) International Publication Number
WO 00/74756 A1

(51) International Patent Classification⁷: **A61M 16/00**

(74) Agents: COLB, Sanford, T. et al.; Sanford T. Colb & Co.,
P.O. Box 2273, 76122 Rehovot (IL).

(21) International Application Number: **PCT/IL00/00336**

(22) International Filing Date: **7 June 2000 (07.06.2000)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:
130369 **8 June 1999 (08.06.1999) IL**

(71) Applicant (for all designated States except US): **ORID-
ION MEDICAL (1987) LTD. [IL/IL];** Har Hotzvim In-
dustrial Area, P.O. Box 45025, 91450 Jerusalem (IL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **COLMAN, Lewis**
[IL/IL]; 7/3 Petel Street, Jerusalem (IL). **LEVITSKY, Ger-
shon** [IL/IL]; 7/12 Meir Yosha Street, 97861 Jerusalem
(IL).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE,
DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,
NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

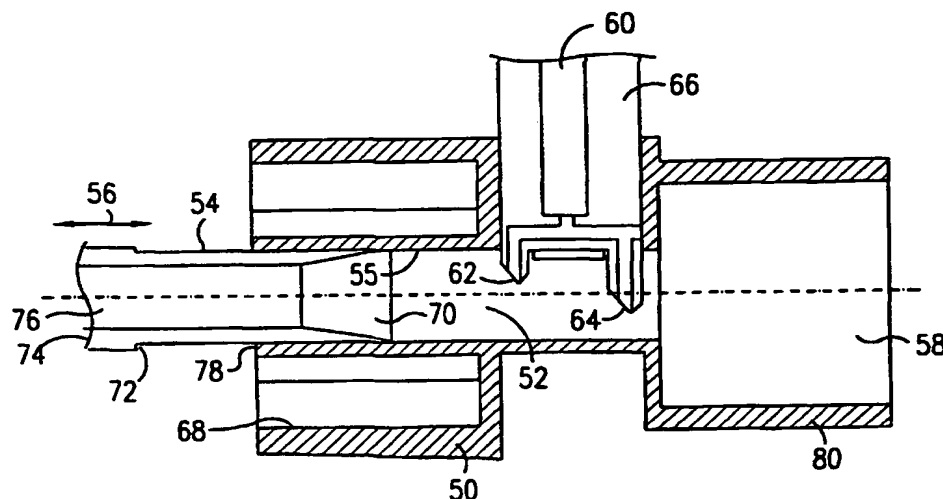
(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- With international search report.
- Before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments.

[Continued on next page]

(54) Title: **NEONATAL AIRWAY ADAPTOR**



(57) Abstract: This invention is a neonatal airway adapter (10) with a sliding internal passage (54), which virtually eliminates void volumes (112) within the bore (76) of the airways, such that mixing of the exhaled gases with void gases is reduced, and the waveform of the breath is maintained without undue distortion. Furthermore, the virtual elimination of void volumes reduces the level of re-breathing. The neonatal airway adapter connects to endotracheal tube adapters in such a way as to nullify the effect of the differing internal diameters (20) and internal lengths which are used in ET adapters currently available. The cross section of the internal bore of the airway through which the breath flows from the ET adapter to the connector of the ventilator is maintained almost constant, especially in the region of the gas sampling point (66), to ensure that reasonable conditions of laminar flow, and accurate sampling are maintained.

WO 00/74756 A1